

Original citation:

Radaelli, Giovanni, Dell'Era, Claudio, Frattini, Federico and Messeni Petruzzelli, Antonio.
(2018) Entrepreneurship and human capital in professional sport : a longitudinal analysis of the Italian soccer league. *Entrepreneurship Theory and Practice*, 42 (1). pp. 70-93.

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Publisher's statement:

Radaelli, Giovanni, Dell'Era, Claudio, Frattini, Federico and Messeni Petruzzelli, Antonio.
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<https://doi.org/10.1177/1042258717732957>

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Entrepreneurship and Human Capital in Professional Sport: A Longitudinal Analysis of the Italian Soccer League

ABSTRACT

The discovery and deployment of human capital are overlooked topics in entrepreneurship research. Professional sport can illuminate these phenomena as sport directors take huge risks in innovating rosters. Our longitudinal analysis of the Italian *Serie A* investigated if sport directors with greater entrepreneurial orientations toward the acquisition of new players outperformed rivals. While soccer organizations with better roster quality and accomplished managers achieved superior rankings, the acquisition of new players had non-significant effects and was moderated negatively by accomplished managers. We argue that entrepreneurs risk with ‘too many’ talents while conformity mechanisms attenuate the entrepreneurial opportunities offered by human capital.

INTRODUCTION

Professional sport competitions represent a unique setting to develop entrepreneurship theory. Professional sport is indeed a hyper-competitive environment, which produces constant pressures on organizations to discover and exploit new opportunities to survive, grow and win competitions. Examples of entrepreneurial behaviors abound at different levels of analysis, from sport leagues (e.g. the growth of the National Football League in the US), to organizations (e.g. the brand expansion of European soccer clubs in China), to single individuals (e.g. the dynamic choices that team managers make during a competition). With so many examples, it is rather surprising that only few studies have looked into this sector to induce new entrepreneurship theory (Ratten, 2010; Grove & Cook, 2011; Terjesen, 2016).

A distinctive feature of professional sport entrepreneurship is the centrality of human talents (Baron & Henry, 2010; Wolfe & Shepherd, 2015). In order to survive, grow and win competitions, sport organizations must be ‘one step ahead’ in the discovery, acquisition and deployment of valuable players (Crook et al., 2011; Di Minin et al., 2014). Soccer organizations, in particular, invest several millions of Euros in worldwide scouting systems to discover talents before competitors, as well as to acquire and retain them. Soccer competitions represent

entrepreneurial cycles, where soccer organizations reset their expectations every year, reassess their rosters and compete by leveraging the performance of their talents.

Overall, directors in sport organizations¹ often display an intense entrepreneurial orientation toward the discovery of new talents and the enrolment of high-reputation team managers to deploy players' elusive potential. This is based on the assumptions that sport directors (i) should pursue an ambitious 'vision of the future' (Dimov, 2011); (ii) can best act upon this 'vision' by renewing human capital through new talents; and (iii) should rely on team managers' reputation to best deploy players' full potential. Yet, the appropriateness of these assumptions remains unknown since anecdotic evidence provides contradictory indications in this regard (Murao, 2016; Wagner, 2010), while academic research has dedicated limited attention to these topics.

Previous entrepreneurship research has mostly focused on how entrepreneurs discover and exploit technological and market opportunities, and how firms grow as a result of this (Covin & Miles, 1999; Wright et al., 2007). By comparison, human capital, i.e. the knowledge, skills and abilities acquired through education and experience, has never been treated as an entrepreneurial opportunity, but 'only' as a resource of the entrepreneur. Hence, we know that entrepreneurs with greater human capital better support firm growth (Marvel, Davis & Sproul, 2014; Rauch & Rijdsdijk, 2013; Unger et al., 2011), and that the human capital of employees and managers is linked with superior performances (Crook et al., 2011). We do not know, instead, if and how entrepreneurs should orient the discovery and deployment of new talents in order to grow and reach better market positioning (Dimov, 2007; 2011).

¹ A sport director is an individual working for sport organizations or with the athletic departments. The responsibility of sport directors include organization and administration, facility supervision, human resources, funding.

In order to address the gaps outlined above, in this paper we ask: (i) *what is the relationship between the number of new talents acquired by sport organizations and their success?* (ii) *how do different approaches to talent acquisition affect the success of sport organizations?* (iii) *what is the role of team managers in moderating the relationship between the acquisition of new talents and the success of sport organizations?*

Building upon these premises, we looked at the experience of soccer organizations in the Italian Premier League (*Serie A*) in the period 1995-2013, for a total of 342 observations. *Serie A* organizations (e.g. Juventus FC, AC Milan, FC Inter) represent an illuminating setting for studying entrepreneurial opportunities offered by human capital. Indeed most organizations expect to win, or at least survive in the premier league, by investing large amounts of money in the discovery and acquisition of new players, and by deploying their talents through accomplished team managers.

In particular, we investigated: (i) whether organizations investing in new players succeed; (ii) whether differences exist in the acquisition of new players through long-term and short-term contracts; and (iii) whether team managers with greater experience in past accomplishments positively moderate the link between the acquisition of new players and success.

The remainder of the article is organized as follows. The next section builds the theoretical framework, first discussing the role of human capital in professional sport entrepreneurship and then developing the research hypotheses. After, we outline our research methods and present our findings. Finally, we discuss our results and derive implications for theory and practice.

PROFESSIONAL SPORT ENTREPRENEURSHIP AND HUMAN CAPITAL

Sport entrepreneurship is a nascent field of research, focused on how the decision-making of communities, organizations and individuals supports the survival, growth and success of sport

organizations. Sport entrepreneurship is characterized by intense and continuous proactivity, innovation and risk-taking behaviors, related to the discovery and exploitation of new markets, technologies, product opportunities and human capital (Ratten, 2010).

Earlier research looked at the human capital of entrepreneurs more than the entrepreneurship of human capital. Human capital represents the knowledge, skills and abilities that individuals acquire from education and work experience (Marcel et al., 2014; Unger et al., 2011). Scholars have studied the human capital of owners, top managers, team managers and players (Baron & Henry, 2010; Fagenson-Eland, 2001). Across all these units of analysis, studies have consistently found that owners and managers with greater human capital are more likely to discover opportunities and succeed (e.g., Marvel and Lumpkin, 2007; Marvel et al., 2014; Rauch et al., 2005; Unger et al., 2011). Other studies used the resource-based view to explain why organizations with greater human capital of managers and players achieve better performances. Such studies argued that valuable resources “in short supply and semi-permanently tied to the firm [deliver] above-average performance” and “knowledge embedded in human capital [is] among the most universal of resources that meet these criteria” (Crook et al., 2011; p. 444). Crook et al.’s (2011) meta-analysis found a direct and positive link between human capital and operational/financial performance (Shaw, Park & Kim, 2013; Kim & Ployhart, 2014). Wright, Smart & McMahan (1995) and Berman, Down & Hill (2002) found that sport organizations with greater human capital of their players and team managers reached superior rankings. These results suggest that the human capital of players has *strategic value* for the firm, thus leading sport organizations to design teams with the ‘best’ players.

Less is known about the *entrepreneurial value* of human capital. Players’ human capital entails opportunities for new ventures. As Dimov (2011) observed: “in abstract terms, the notion of

96 opportunity reflects the idea that an economic system never reaches its full potential and so there
97 is always room for actions that can take it closer to that potential” (p. 60). Hence, “an
98 opportunity can be seen as a vision of a future in which the aspiring entrepreneur occupies a
99 market niche, engaged in a set of market relationships that collectively constitute the business the
100 entrepreneur intends to create” (p. 68). For soccer organizations, this vision involves the
101 discovery and deployment of new players. Indeed, the discovery and acquisition of great talents
102 represent *the* way for sport organizations to conquer a better market niche (e.g. promotion into a
103 premier league, or qualification into international competitions), multiply the possibility of
104 strategic choices (e.g. modelling different lineups, choosing new game-day tactics) and improve
105 the popularity of the team (e.g. in terms of marketing revenues). Hence, sport organizations do
106 not just enroll players to design an appropriate team, but use the discovery and acquisition of
107 new talents to inform and implement their ‘vision of the future’. While the former reflects the
108 human resource management function of the team manager (i.e. the “coach” and “trainee”), the
109 latter represents the entrepreneurial function of sport directors. Sport directors are top managers
110 – comparable to CEOs in firms in other sectors – delegated by the owners of the soccer clubs to
111 make the key decisions about new target niches, the discovery and acquisition of new talents, as
112 well as the identification of team managers. With owners typically focused on other core
113 businesses, sport directors are actually the ones developing the ‘vision of the future’ and acting
114 upon it. In English soccer, the figures of team manager and director often overlap, as the former
115 has extensive power to develop the ‘vision’ for the organization (e.g. Ferguson for Manchester
116 United). In our empirical context, i.e. Italian Soccer, the two figures are instead distinct as the
117 sport director discovers and acquires players according to his ‘vision, while team managers
118 deploy the talents.

Our study thus focuses on the entrepreneurial orientations of sport directors, who engage with the discovery and acquisition of new players through different approaches.

The entrepreneurial orientation of sport directors

Lumpkin and Dess (1996) defined entrepreneurial orientation as the “propensity to act autonomously, a willingness to innovate and take risks, and a tendency to be aggressive toward competitors and proactive relative to marketplace opportunities” (p. 137). The authors argued that entrepreneurial orientation should have positive and direct effects on final performance, and that this link is influenced by environmental and organizational factors.

The entrepreneurial orientation of sport directors is often very high, as they are constantly on the hunt for new players. Such proactiveness and aggressiveness are underpinned by the belief that the labor market generates new opportunities every season (e.g. young new talents, players achieving maturity) and that their prompt discovery and acquisition allows greater chances to achieve new market niches. Several reasons might increase the entrepreneurial orientation of sport directors toward new players.

First, players play a central role in the ‘vision of a better future’ and the discovery of new players represents the most direct way for sport directors to influence performance. Other types of firms can pursue different opportunities – e.g. new technologies, supply-chain configurations, customer services, products and organizational structures (Shane, 2003). These are not available to sport directors, who (i) cannot act upon tournament rules, technologies, and product configurations (as these are controlled by the league commissioners), and (ii) are not motivated to act upon other elements (e.g. customer services) which are less relevant for the ‘vision’ of a better market niche.

Second, sport contexts are inherently competitive and dynamic, so that opportunities constantly change. Expectations are reset at the beginning of each new season, and the competitive advantage acquired in the past is almost irrelevant, as the organizations must ‘play the game’ from scratch. So, entrepreneurs may feel the need to proactively and aggressively discover new players to achieve the desired ‘vision’, while inertia might reduce the capacity to reach ‘full potential’. Furthermore, sport entrepreneurs may acquire new players ‘tactically’ to put pressure on their rivals, i.e. remove potential opportunities that others might deploy to win the competition (Dietl et al., 2008). Third, there is extensive evidence of path-breaking decisions in sport environments as rivals constantly try to emulate or defeat each other’s practices (Di Minin et al., 2014). Therefore, sport directors must proactively look into new opportunities to generate competitive advantages, by breaking existing paths and finding new ones.

There are also two environmental factors that may influence the perceived risks of high entrepreneurial orientation. On the one hand, soccer organizations face the risk of *not* acting entrepreneurially. Soccer organizations face strong expectations from media and fans to acquire new players. External pressures are channeled by social media, TV and radio programs, specialized websites, and even protests and flash mobs; these can be so intense that several owners and top managers have been replaced because of them (Gerrard, 2000; Park, Mahony & Kim, 2011). On the other hand, sport directors may perceive limited risk in the deployment of new players. Advanced forms of socialization tactics are indeed implemented to adjust new players and team managers in the organization. Soccer organizations, for instance, organize extensive training camps where players get physically fit, prepare tactics and improve their technical skills, as well as shape the sense of community amongst players and the mutual integration of newcomers with the ‘old guard’ (Benson, Evans & Eys, 2016).

In conclusion, whether intense entrepreneurial orientation in the discovery and acquisition of human capital actually yields superior performances remains unknown and represents the core contribution of our article.

HYPOTHESES DEVELOPMENT

In this section, we present our hypotheses by first discussing the expectations and practices from the field, and then the theoretical arguments from earlier research.

Discovery and acquisition of human capital: number and contracts of new players

Several organizations invest a lot of money on new players regardless of their most recent accomplishments (Deloitte, 2016). Four reasons may suggest why the acquisition of new players should yield superior performances. First, soccer organizations might suppose that the value of a roster decreases as a result of age, injuries and slackening. Hence, inertia might result in weaker performances. Conversely, the transfer market provides a constant inflow of new talents, emerging from youth systems and international leagues. Second, the acquisition of new players ‘steals’ talents from competitors. Soccer organizations often try to ‘kill’ the most immediate competition by acquiring their best talents or complicating their transfer plans. Third, the acquisition of new players may generate constant alertness among established players. The constant ‘threat’ of being replaced reduces the risks of complacency among the ‘old guard’. Finally, pressure from media and fans is increasing thanks to the diffusion of broadcasting coverage, analytics & statistics, and social media; by satisfying their ‘hunger’ for new players, sport organizations may receive greater support from fans and media, which helps players perform appropriately during matches.

The acquisition of new players may however not have linearly positive effects on performance. Indeed, ‘too many’ players in the same position might disrupt decision-making. Team managers

187 may struggle to put top players ‘on the bench’, so they introduce compromising solutions (e.g.
188 team rotations) that ultimately inhibit team synergies and thwart the quality of performance.
189 Second, ‘too much’ internal competition increases the possibility of internal rifts between
190 players, especially when they compete for the same spot; resentment toward team managers who
191 make decisions on playing time; and faultlines between the ‘old guard’ and new players. Finally,
192 organizations often face resource constraints and cannot invest in new players without divesting
193 others. The impact of new players might be attenuated by ‘sacrifices’ made elsewhere.

194 These expectations resonate with earlier theory on the effects of newcomers in organizations
195 (Forbes et al., 2006; Rink & Ellemers, 2009; Rink et al., 2013). On the upside, newcomers
196 provide new knowledge, competences and skills, which add to or complement the human capital
197 already available in an organization (Bauer et al., 2007; Mathieu et al., 2014; Rink et al., 2013).
198 Newcomers also provide new perspectives and approaches that reduce the complacency of the
199 ‘old guard’ (i.e. old-timers). They inject ‘new blood’ into the organization and their new ideas,
200 perspectives and approaches can challenge the status quo and spur more radical forms of
201 innovation (Perretti & Negro, 2007). On the downside, newcomers may disrupt internal stability
202 (Mathieu et al., 2014; Rink et al., 2013). Old-timers may perceive newcomers as a threat to their
203 values, interests and practices, and may not accept them as legitimate coworkers and often do not
204 socialize newcomers. In these circumstances, the organization struggles to perform appropriately
205 (Bauer et al., 2007; Ferriani et al., 2009; Forbes et al., 2006). Likewise, newcomers may refuse to
206 socialize with old-timers and enact threats to established values, interests and practices (Rink et
207 al., 2013). Newcomers may decide not to actively seek information on the work context or
208 engage in social relationships to increase role clarity and task coordination (Bauer et al., 2007;
209 Beus et al., 2014). When old-timers’ receptivity is low or newcomers do not actively try to be

involved, negative effects may become predominant, since newcomer entry stymies internal team cohesion, viability and transactive memory (Rink et al., 2013). Combining these arguments, some recent study tested a curvilinear hypothesis between newcomers' entry and organizational performance (Ferriani et al., 2009; Ramos-Villagrasa et al., 2012). Following these considerations, we thus hypothesize that:

H1: The number of new players acquired by a soccer organization has curvilinear (inverted-U shaped) effects on its championship ranking.

Soccer organizations acquire new players through long-term contracts or short-term loans (one year or less). Organizations overwhelmingly privilege the first option to loans. Long-term contracts provide organizations with control over a player's tenure as they (i) legally become first movers in contract extensions (competitors cannot approach the player until six months away from contract expiry date); (ii) decide where and how the player could move during the contract duration, usually avoiding direct competitors and receiving money in return. The acquired player thus 'belongs' to the organization and is indefinitely removed from competitors. Instead, loaned players help the organization 'only' during the single season, after which they move back to the original employer.

These behaviors resonate with theory on newcomers' receptivity (Rink et al., 2013), according to which newcomers with short-term and long-term contracts adjust differently to the organization. Old-timers are more likely to invest time, resources and personal engagement in socializing long-term newcomers – and vice versa. Both have reasonable expectations to interact for a long time, so they are more motivated to act collaboratively. Long-term newcomers, in particular, are more motivated to behave in accordance with existing rules and practices than short-term newcomers (Rink & Ellemers, 2009). Having fewer expectations and intentions to remain, short-term newcomers are instead more detached from the rules and practices of old-timers, and express

their personal identities more freely (Rink et al., 2013). Employees with expectations of short-term contract are likely to pursue ‘careerism’ and rely on transactional rather than psychological contracts to engage with coworkers (De Cuyper et al., 2008). Thus, they might hoard their unique skills and knowledge and act on a ‘hidden profile’ (Stasser & Titus, 2003), or enact an oppositional identity to spur radical changes in the status quo (Rink et al., 2013). Combining these insights, we thus hypothesize that:

H2: The acquisition of new players by a soccer organization through long-term contracts has more positive effects on its championship ranking than the acquisition of new players through short-term loans.

Deployment of players’ human capital: the role of team managers

We now focus on the role of team managers in the deployment of players’ human capital. Earlier research highlighted the role of line managers as corporate entrepreneurs during the deployment of opportunities (Kuratko et al., 2005). Particularly, team managers supervise the socialization and performances of players (Zhang, 2017), but they also act as micro-entrepreneurs who discover and deploy real-time opportunities during matches and tournaments (Frick et al., 2006; Wolfe & Shepherd, 2015). So, they are expected to have a direct effect on performance, as well as moderate the impact of new players on performance.

Soccer organizations give extensive authority to team managers, who control how players adjust in the new organization, define the conditioning tactics (e.g. workouts) to put players in physical shape, and organize strategic meetings to instruct game plans. Hence, the discovery of ‘appropriate’ team managers is important to fulfil the ‘vision’ of the sport directors. Earlier research generally agrees that entrepreneurs and top managers with higher human capital (in terms of education, experience and task-related skills) are more likely to achieve firm survival and growth (Marvel et al., 2014). Yet, soccer organizations tend to select team managers according to their reputation – measured primarily by their previous accomplishments – rather

than their human capital. Real Madrid, for instance, traditionally selects team managers with the most accomplishments in the recent past. The enrolment of José Mourinho, Fabio Capello and Carlo Ancelotti reflects an assumption that who ‘won the most’ is also ‘the best’ in the market. Other organizations discard the idea that the number of past accomplishments is a valid proxy of managers’ human capital. AC Milan and FC Barcelona, for instance, take more risks in discovering young team managers (e.g. Arrigo Sacchi and Josep Guardiola).

Past research suggests that individuals’ reputation may be a safe proxy for human capital. Previous experiences of success may enrich an individual’s human capital, as they affirm what operational knowledge, emotional intelligence and heuristics are appropriate to navigate new entrepreneurial endeavors (Wolfe and Shepherd, 2015). Successful individuals are more confident as well as more informed of ‘what it takes’ to win. They can also be more assertive, using their past victories to legitimize their decision-making. So, subordinates are more likely to respect them and follow the instruction during complex situations (Dirks, 2000; West et al., 2003).

Combining these insights, we hypothesize that:

H3: Soccer organizations with greater team managers’ experience in past accomplishments have higher championship ranking.

The above arguments also apply when we look at the role of team managers in socializing new players, and in trying to ‘extract’ the best value from them. Team managers can do so by clarifying sources and information on relevant tasks, boundaries and authorities, designing work and instructions that orient, engage and energize the worker, developing norms of conduct, information systems, incentives and sanctions, and coaching workers to use their individual skills and collective resources (Ashforth et al., 2007; Bauer et al., 2007). Managers with greater reputation might enact these tasks more effectively because their greater experience, skills and knowledge help them understanding the identities, frames and meanings of their workers,

recognizing the faultiness separating old-timers and newcomers, and increasing their capacity to prevent/moderate conflicts (Hitt et al., 2001). Managers with greater reputation also have greater ‘referent power’, i.e., more ability to increase others’ feelings of obligation and responsibility towards the organization and consider the manager/leader as a role model (Zinko et al., 2007). A distinction can be made between new players with short-term and long-term contracts. Short-term newcomers may be relatively immune to managers’ referent power, as they rely on transactional rather than psychological contracts with their managers (De Cuyper et al., 2008). Thus, short-term newcomers might be more likely to develop more independent and personal decisions/behaviors (Rink & Ellemers, 2009). Conversely, long-term newcomers may identify with the organization, and conform to the referent power of their supervisors (Zinko et al., 2012). Taken together, these considerations lead us to hypothesize that:

H4: Team managers with higher experience in past accomplishments moderate positively the effects of new players on championship rankings, i.e. the acquisition of new players has a more positive effect on championship rankings when team managers’ experience in past accomplishments is higher.

H5: Team managers with higher experience in past accomplishments more positively moderate the effects of new players acquired through long-term contracts on championship rankings than the effects of new players acquired through short-term loans on championship rankings.

METHODS AND MEASURES

Empirical Setting

These hypotheses are tested in the context of the Italian *Serie A*. This professional league has developed into a remunerative industry with total revenues exceeding €2.2 billion per year and spread among its 20 clubs. These revenues come from match-day tickets, broadcasting rights, commercial agreements and player trades (FIGC, 2016). Yet, the costs exceed €2.5 billion per year, with 50% of the costs associated with player salaries and trades (FIGC, 2016). The survival, growth, and success of *Serie A* organizations can be measured in two different ways.

309 On the one hand, their survival, growth and success in the *Serie A* competition derive from the
310 capacity of their players to avoid relegation, growth can be measured by improvements in table
311 positions over the years and success is linked with final victories or, at least, clinching spots for
312 international competitions. Differently, the survival, growth and success in *Serie A* businesses,
313 like other entertainment sectors, depend on the capacity to generate profits, or at least sustainable
314 losses (FIGC, 2016). The two dynamics are connected with each other, since cash-flows grow or
315 decline according to club results (Deloitte, 2016). Most noticeably, relegated organizations
316 cannot access the main broadcasting rights (which represent around 60% of the total revenues).
317 The two dynamics do not strictly depend on each other, though, as successful soccer clubs might
318 fail due to ownership problems (e.g. Fiorentina in 2002). We will focus on the sport
319 performances in *Serie A* competitions, as this is where players' and team managers' human
320 capital produce the most direct effects.

321 *Serie A* organizations acquire players in an open transfer market characterized by the progressive
322 elimination of isolating mechanisms. *Serie A* adopted the broader EU legislation regarding the
323 free circulation of communitarian workers. The Bosman ruling in 1995 banned restrictions on the
324 mobility of EU players in EU leagues. Previously, *Serie A* organizations could acquire a fixed
325 number of foreign players, which thwarted the number of transactions inside and outside Italy.
326 FIFA regulations also stipulate that player contracts can have a maximum length of five years
327 (during and after which they must be renegotiated). Formally, no organization can negotiate
328 contracts with players owned by other teams, until six months before the expiry date. Infractions
329 are sanctioned with penalizations and bans. Nevertheless, on several occasions, players move
330 during their tenure with transfer fees paid by the acquiring club to the former employer. Unlike
331 most industries, soccer organizations trade players for an amount of money that reflects the

buying club's perception of the player's value. Transfer fees vary considerably, but often exceed the millions of Euros (the record is currently Gonzalo Higuain's transfer to FC Juventus for €90M in 2016). Similarly, player contracts are highly remunerative (the highest salary is currently earned by Higuain with €7.5M per year). No salary cap regulates payrolls.

All *Serie A* organizations have institutionalized scouting systems to discover and acquire new players, as well as training systems and socialization tactics to deploy their talents. *Serie A* organizations have a network of scouts, covering the main leagues in Europe, South America, and Africa. Extensive information about players is often available even to fans and media, e.g. with databases such as Transfermarkt, providing 'raw data' on the history and stats of players, and popular applications such as Football Manager that provides analyses of skills and potential. While data have become more accessible, the assessment of players' talent has not become easier. Investments in human capital are a source of financial risk for the organization, since poor player performances generate the need for new expenditure to acquire substitutes, and potentially significant capital losses if the organizations fail to trade the player or trade him at a lower price.

***Serie A* Competition**

Serie A competition is currently fourth in UEFA rankings and hosts four (Juventus, AC Milan, AS Roma and Inter Milan) of the 20 clubs with the highest revenues in Europe (Deloitte, 2016). In 2013/14, total *Serie A* revenues amounted to almost \$2 billion from broadcasting, match-day tickets and merchandise. *Serie A* follows a true round-robin format from late August to early June. The 20 teams play against each other twice for a total 38 matches. Teams can use lineups with 11 players with three substitutions and are awarded three points for each win, one for a draw and none for a loss. The team with most points wins the *Scudetto* (i.e., championship). The top three teams in *Serie A* qualify for the UEFA Champions League, teams finishing 4th to 6th

qualify for the UEFA Europa League, the three lowest placed teams ‘exit the market’ and are relegated to *Serie B* (i.e., second division). Higher ranking position engenders superior revenues as *Serie A* winners, Champions League and Europa League qualifiers receive financial bonuses. The acquisition of new players occurs in two ‘transfer windows’ (June-August and January). In the 2015/16 season, the value of these transactions amounted to almost \$800 million.

The data to test our hypotheses were extracted from www.transfermarkt.com, covering the *Serie A* seasons from 1995-1996 to 2012-2013, i.e., after the Bosman ruling liberalized the transfer of players in the European Union. Transfermarkt is a German-based website that collects and provides football information including scores, results, transfer news and player values, and reports detailed information on several championships: 49 A-Leagues, 35 B-Leagues and 57 National Trophy Competitions in Europe. Transfermarkt provides detailed and longitudinal data on individual players and coaches (e.g., age, nationality, career, transfers, awards, personal performance) and includes daily updates on their careers, histories and transfers (with details on the nature of moves, e.g., loan or full transfer). Finally, it contains information on team performance in terms of match scores, rankings and several details on the organization (e.g., stadium capacity, achievements, roster size, links to team websites).

Dependent Variable

Our dependent variable *TableRanking* measures competitive performance with the ranking of each organization at the end of the season, ranging from 1 (best performance) to 20 (lowest performance)². This measure describes the final position achieved by each team at the end of the season, resulting in different national honors and financial rewards (Brannick, Salas, & Prince, 1997). The final ranking in the championship represents the performance for which the players’

² To explain the results more straightforwardly, we measured our dependent variable in the range from -1 to -20.

human capital is primarily responsible and is a key indicator of the soccer organization's success and market attractiveness (Koenigstorfer, Groeppel-Klein, & Kunkel, 2010).

We do not implement a commercial/financial performance measure as one of our dependent variables because, as noted, the role of players' human capital is indirect and moderated by a number of factors outside of their control. Notably: (i) a large portion of broadcasting-related revenue depends on the team's catchment area, irrespective of actual performance in the season (e.g., organizations in Rome, Milan, Turin and Naples tend to have more money than others because they have more fans and thus more potential TV customers); (ii) large commercial revenues depend on negotiations with sponsors, which are managed by other departments/units in the organization (Deloitte, 2016). Therefore, revenues do not immediately reflect the 'success' of the organization, but a combination of loosely linked factors. Finally, our dependent variable is temporally lagged (one year) respect to the independent variables, hence avoiding issues about the direction of causality. Teams also tend to hire new players during two transfer periods, i.e. a 'summer session' and a 'winter session'; this further reduces problems about reverse causality.

Independent Variables

Related to H1, we use the *NewPlayers* measure to represent the number of newcomers that an organization acquires each season. As all teams are of a comparable size, relative measures of newcomer entry are considered redundant (Ferriani et al., 2009). In a separate analysis, to address H2, we differentiate between the *AcquiredPlayers* variable, calculated as the number of new players acquired through multi-year deals, and the *LoanedPlayers* variable, calculated as the number of new players acquired on loan. In both the 'summer' and 'winter' sessions of players transfer organizations can acquire long- and short-term newcomers.

Related to H3 and H4, we use the *TeamManagerAccomplishments* measure to describe the human capital of team managers. We adopt an objective measure that considers the past accomplishments of the individuals rather than external assessments by the media, peers, managers and/or players as well as manager self-assessments. This approach is based on the definition of reputation as “a perceptual identity formed from the collective perceptions of others, which is reflective of the complex combination of salient personal characteristics and accomplishments, demonstrated behavior, and intended images” (Zinko et al., 2007, p. 165). The variable is specifically evaluated as the total number of competitions won by the head coach including Italian (e.g., *Serie A*, *Coppa Italia*), European (e.g., *Champions League* and *Europa League*) and international (e.g., *World Cup*) competitions.

Control Variables

We control for other factors that may influence table rankings. First, *RosterQuality* controls for the soccer team’s overall human capital. Unlike firms in most other sectors, soccer organizations trade individual players for a fixed amount of money, which is then recorded in financial statements as a capital asset (along with amortization). Although theoretically a perfect opportunity to develop a market-based value of players’ human capital: (i) few organizations report data on players’ values in their financial statement; (ii) when available, these may relate to their actual technical value in a rather spurious way (Risaliti & Verona, 2013). Likewise, quantifying players’ human capital through their contracts is problematic as this variable artificially represents the actual human capital of players (e.g., players may earn a great deal more than colleagues in another club not because of their higher productivity, but because of their employer’s bargaining power). More than theoretically questionable, data on players’ market value do not cover all seasons under investigation (only available from the 2005/2006

season). Accordingly, we implement a variable that recognizes the technical value of players. Specifically, players are reviewed and signed up by national head coaches, who act as external and independent observers. We thus adopt the total number of matches played in the national squads as a suitable proxy of players' human capital (Cattani & Ferriani, 2008).

Second, *OrganizationalProximity* controls for the effect exerted by team members' familiarity on interaction ease, information and knowledge exchange (Boschma, 2005; Cattani et al., 2013). This variable is measured by the average number of seasons each player was on a given team.

Third, we include proximity measures that reflect the existence of demographic and work-related fault-lines across members that could enable or endanger performance (Lau & Murnighan, 1998). The *CulturalProximity* measure reflects the average cultural proximity between players' birthplaces. We employ Kogut and Singh's (1988) measure based on Hofstede's (1980, 2001) four cultural dimensions. This index is largely adopted to account for cultural differences (Capaldo & Messeni Petruzzelli, 2011; Lavie & Miller, 2008) and is measured as:

$$CD_{a-b} = \sum_{i=1}^4 \frac{(I_{i,b} - I_{i,a})^2 / V_i}{4}$$

where CD_{a-b} is the cultural distance between the countries of birth of players a and b ; I_{ib} and I_{ia} are the scores for the i_{th} cultural dimension and countries of players a and b , V_i is the variance of the i_{th} cultural dimension. The scores for each country on the four dimensions derive from http://www.geert-hofstede.com/hofstede_dimensions.php. Cultural proximity is thus calculated as the inverse of the above measure for each pair of players and then averaged per team.

Fourth, we control for different properties in team composition, namely, size (*RosterSize*) measured by the total number of players on the team in each season, and age (*RosterAge*) measured by averaging the players' age in each season (Mathieu et al., 2014; Stewart, 2006).

Fifth, we control for variables that reflect the financial performance and reputational ‘weight’ of soccer organizations. *Serie A* competition (as most other soccer competitions) is characterized by a relatively small group of top clubs that compete for final victory, while others traditionally compete for lower ranks. Hence, we include a proxy for organizational reputation (*OrganizationalReputation*) measured by the total number of previous seasons won by the team in *Serie A*. To account for financial results, we then include a proxy of the organization’s bargaining power through the *NetTransfer* variable measured as the difference between the money received from selling players and the money spent for acquiring players. We emphasize that we intend to measure the bargaining power actually used in the competition season rather than a more theoretical definition of entrepreneurs’ available finances. Indeed, in several cases, club owners have seasons/periods in which they hold back from investing money in soccer clubs and hence have lower expectations regarding final performance. In addition, we include a proxy of the organization’s catchment area with the *StadiumSeats* variable measured as the overall size of the team’s local stadium.

Finally, we control for the presence of penalization points (*Penalization*), which can affect the championship ranking. In this regard, we introduce a dummy variable whose value is equal to 1 if the team has been penalized for administrative or other unfair behaviors.

Data analysis

Our dataset is an unbalanced panel with 342 observations. To test our hypotheses, we use panel negative binomial regression models. Our dependent variable is a count and integer variable, rendering linear regression modeling inadequate as the distribution of residuals will be heteroskedastic non-normal. Additionally, the dependent variable does not meet the condition of having a mean equal to standard deviation, violating the Poisson assumption. We hence consider

the negative binomial estimation to be more suitable to analyze our data as this allows the variance to differ from the mean (Hausman, Hall, & Griliches, 1984). Moreover, we adopt the random-effects rather than the fixed-effects specification according to the Hausman test results. We estimate the models using the ‘xtnbreg’ routine included in the STATA 12.0 software package. The potential multicollinearity tests indicate that the maximum variance inflation factor index is below the critical value of 10 (Kleinbaum et al., 1998), thus eliminating any concerns.

RESULTS

Table 1 reports the descriptive statistics in terms of means, standard deviations and correlations. The correlation values between the independent variables fall below the 0.70 threshold, indicating acceptable discriminant validity (Cohen et al., 2003). Finally, we included variance inflation factor index in the analysis. The maximum value (2.361) does not exceed the critical value of 10 (Kleinbaum et al., 1998), hence indicating no multi-collinearity issues. Furthermore, we performed the Durbin–Wu–Hausman test for endogeneity (Davidson & MacKinnon, 1993). Specifically, we introduced *TeamMarketValue* as instrumental variable, represented by the total economic value of team players. Results avoided endogeneity issues.

“Insert Table 1 about here”

Table 2 presents the results of the regression analyses. Model 1 only includes the effects of the control variables on team performance, Model 2 the effects of *NewPlayers* and Model 3 the quadratic effects of *NewPlayers*.

“Insert Table 2 about here”

In line with H2, we consider only the linear effects of both *AcquiredPlayers* and *LoanedPlayers*. However, when including the squared terms, these are insignificant, thus supporting our initial assumption. Model 4 includes the distinct effects of *LoanedPlayers* and *AcquiredPlayers* while

Models 5 and 6 report the contingency effects of *TeamManagerAccomplishments* on *NewPlayers*, *LoanedPlayers* and *AcquiredPlayers* respectively. Lower values of *TableRanking* indicate better relative competitive performance while a negative coefficient indicates a positive effect (and vice versa).

Regarding the control variables, Model 1 shows that both *RosterSize* ($\beta = -0.033$, $p < 0.001$) and *RosterAge* ($\beta = -0.050$, $p < 0.05$) exert a negative effect on team performance, signaling that a large number of members may entail excessive coordination costs (Cohen et al., 1996), which may in turn hamper the competitive results, while old members may reduce the team's capability to respond to new stimuli and extensive workloads (Timmerman, 2000). However, the latter appears unstable, as shown for instance in Model 6 ($\beta = -0.034$, $p < 0.1$). In line with existing literature (e.g., Ertug & Castellucci, 2012), *OrganizationalReputation* ($\beta = 0.032$, $p < 0.001$) exerts a positive effect on *TableRanking* along with *StadiumSeats* ($\beta = 9.06e-6$, $p < 0.001$). By contrast, *NetTransfer* consistently exerts a non-significant effect across the models ($\beta = -0.002$, $p < 0.1$) along with the two proximity measures *CulturalProximity* ($\beta = -0.215$, $p > 0.1$) and *OrganizationalProximity* ($\beta = 0.054$, $p > 0.1$). Regarding the role of human capital, we first observe that the control variable *RosterQuality*, representing the team's overall human capital, exerts a positive effect throughout the models ($\beta = 0.025$, $p < 0.01$). This emphasizes that increases in players' human capital translates into superior *TableRanking*.

Regarding the specific role of new players, Models 2 and 3 show that *NewPlayers* has a significant linear and negative effect on *TableRanking* ($\beta = -0.041$, $p < 0.05$ in Model 3). This negative effect disappears with the moderation of *TeamManagerAccomplishments* in Model 5 and, more importantly, splits into two when recognizing the difference between short-term and long-term newcomers in Model 6. Specifically, *LoanedPlayers* is negatively related to

TableRanking ($\beta = -0.021, p < 0.05$) and *AcquiredPlayers* is not associated with any significant effect. These results do not support H1, which assumes a quadratic (inverted-U shape) relationship between new players and championship ranking, yet interestingly support H2 in showing that the effect of loans is more negative than long-term acquisitions. This means that *Serie A* organizations (i) do not achieve negative or positive effects when they acquire new players; and (ii) might need to expect weaker growth when they invest in loans.

Regarding the role of head coaches' human capital, Model 6 shows that *TeamManagerAccomplishments* is positively related to *TableRanking* ($\beta = 0.040, p < 0.05$), thus supporting H3. However, *TeamManagerAccomplishments* negatively moderates the effect of *NewPlayers* ($\beta = -0.004, p < 0.01$); the empirical results does not support H4. The moderation is negative also for both *LoanedPlayers* ($\beta = -0.009, p < 0.05$) and *AcquiredPlayers* ($\beta = -0.004, p < 0.05$); the empirical results support H5 in showing that the moderation is more negative for loaned players than acquired ones. This means that *Serie A* organizations (i) achieve superior growth when they rely on team managers with more experiences of previous success (as this arguably approximates their skills and knowledge), but (ii) might need to expect a weaker impact of new players under managers with more experiences of previous success. To test the robustness of our findings, we operationalize the dependent variable differently. Using the measure that Szymanski and Smith (1997) suggest, we also operationalize team performance as:

$$TeamPerformance_{it} = \ln \left(\frac{CompetingTeams_t + 1 - TeamRank_{it}}{TeamRank_{it}} \right)$$

where *CompetingTeams_t* is the number of teams competing in *Serie A* in season *t* and *TeamRank_{it}* is the ranking of team *i* in season *t*. Adopting this measurement confirmed our overall results.

DISCUSSION

Previous entrepreneurship research has studied the human capital of entrepreneurs, arguing that individuals with more knowledge, skills and abilities make ‘better’ decisions regarding firm survival and growth (Marvel et al., 2014; Rauch & Rijdsdijk, 2013; Unger et al., 2011). Our understanding of the entrepreneurship of human capital remains instead vague. To address this gap, we focused on how entrepreneurial orientations linked with the discovery and deployment of new talents influence performance. Previous studies found that a greater ‘stock’ of human capital supports superior performances (Crook et al., 2011). In this paper we looked at the ‘flow’ of new talents to investigate if organizations with more proactive, risk-taking, innovative and aggressive orientations outperform rivals (with comparable human capital). If so, organizations should not just focus on resource configuration, but also on its constant renewal. The professional sport sector represented an ideal setting to generate theory on this topic. Players’ human capital represents the key opportunity acted upon by sport directors to achieve new market niches. Like CEOs in firms, sport directors are delegated by owners to develop and act upon the ‘vision of the future’ for the soccer club. With decisions on new technologies, structures and rules out of their control, the entrepreneurial orientation of sport directors manifest itself in the discovery of new talents, and in the selection of team managers for their deployment. Based on our results, we provide three main insights.

First, we suggest that entrepreneurs do not risk with ‘too much’ human capital, but risk with ‘too many’ talents. The survival and growth of soccer organizations appears relatively indifferent to the composition of talents: the number of new players (differently from Hypothesis 1), cultural and organizational proximity of players are not correlated to championship ranking. Rather, the linearly positive relationship between roster quality and table ranking suggests that - as far as the

overall quality of human capital increases – organizations can expect greater chances of survival and growth. This resonates with Crook et al. (2011), arguing that superior human capital generates superior competitive advantages. A resource-based view might suggest that players' human capital is a unique asset that yields competitive advantages. Conversely, organizations which accumulate 'too many' talents reduce their capability to survive, grow and succeed. The negative relationship between team size and rankings can be explained in two ways, i.e. (i) larger groups of talents are more likely to enter into interpersonal conflicts as they compete for a limited and non-negotiable amount of roster spots; and (ii) the decision-making of team managers is complicated by the existence of 'too many' options.

Second, our study looked into the discovery and acquisition of new talents as the expression of the entrepreneurial orientation of sport directors. The hypothesis of curvilinear relations between roster acquisitions and final ranking was not supported, as the number of new talents had no significant impact. To interpret this result, we suggest that certain initiatives neutralized the risks and opportunities attached to the discovery and deployment of new talents. Specifically, new talents brought along opportunities of *variety*, i.e. differences in expertise, functional background and experiences, and the risks of *separation*, i.e. differences in beliefs, values and cultures (Harrison and Klein, 2007). Variety increases creativity and performances, as individuals possess non-redundant knowledge and decision-making becomes more flexible; separation decreases performances, as individuals engage with interpersonal conflicts and are less cohesive. Opportunities of variety are balanced with the risks of separation or, as we suspect, both are lessened by institutional and organizational factors. The role of socialization tactics is especially intriguing. Our model did not include variables on socialization tactics, as they are common practice across all *Serie A* teams. Indeed, all teams engage with induction events, training camps,

580 weekly trainings and match-day preparations, which are meant to adjust new players with the
581 ‘old guard’ and curtail the risks of different values and cultures (Ashforth et al., 2007; Bauer et
582 al., 2007). Arguably, these tactics generate *compliance* to top-down sets of rules and role
583 assignments that they cushion the positive effects of individual creativity and productivity. This
584 resonates with theories of conformity and cognitive lock-in in organizational behavior studies
585 (Gargiulo & Benassi, 2000), according to which individuals in new social contexts pursue
586 stability and acceptance from the ‘old guard’ as their primary objective (Cable et al., 2013).

587 In partial revision to this, the empirical results about Hypothesis 2 suggest that the acquisition of
588 new players through short-term loans can introduce additional risks. To interpret this result, we
589 take inspiration from earlier organizational behavior research, according to which newcomers
590 have lower motivations to integrate with old-timers when they expect to leave the organization
591 soon; and similarly old-timers have fewer motivations to integrate them into the team (Rink et
592 al., 2013). The separation of values, beliefs and cultures is accentuated by the different affiliation
593 of players, as the old guard and the acquired new players both ‘belong’ to the organization, while
594 the loaned new players belong to other employers. When this happens, loaned players (i.e.
595 employees with short-term contracts) are likely to focus on the transactional rather than
596 psychological aspects of their contracts, hence optimizing their individual performance and their
597 visibility regardless of collective goals (Rousseau, 1990).

598 Third, the number of past accomplishments is a good proxy to measure the capacity of team
599 managers to exploit the human capital of the roster. Yet, accomplished managers introduced
600 peculiar risks in the exploitation of new players. On the upside, we find evidence that
601 organizations with more accomplished team managers achieved superior table rankings (as
602 expected by Hypothesis 3). We interpret this result along with prior research on the effect of past

603 successes on entrepreneurial skills. Indeed, past accomplishments not only represent a proxy of
604 discovery/exploitation skills, but also represent events that (i) energize and inform the decision-
605 making of individuals and (ii) increase their referent power toward players (Zinko et al., 2012).
606 On the downside, we found a negative moderation between the selection of team managers with
607 more accomplishments and the acquisition of new players (differently from Hypothesis 4). We
608 suggest that the negative moderation is consistent with a hypothesis of *conformity* for both team
609 managers and new players. Based on their past successes, team managers might be more likely to
610 replicate their routines and tactics regarding the socialization of new players – as they expect to
611 replicate victories. Their possible rigidity might clash with new players, while less established
612 team managers are more flexible – and perhaps more exposed to the ‘star power’ of new players.
613 On the other hand, new players respond to managers’ referent power by pre-empting any attempt
614 to experiment with new ideas and behaviors and/or emulating managers as role models. The
615 greater a manager’s referent power, the more employees (embedded in compliance
616 culture/tactics) assume follower behaviors (Groves, 2005). Team managers’ referent power is
617 arguably enforced in the context of strong socialization tactics (e.g. training camps) that
618 centralize decision-making (e.g., players are asked to adhere to specific tactics and individual
619 roles) and make clear separations between roles (Zhang, 2017). In such contexts, new players are
620 located in a subordinate position and become less likely to think and act ‘outside of the box’.
621 Noticeably, the moderation between the selection of team managers with more accomplishments
622 and the acquisition of new players is (slightly) less negative for new players with short term
623 contracts. This is consistent with Hypothesis 5, i.e. short-term newcomers who expect to leave
624 soon are less likely to conform to the values and practices of the hiring organizations, and thus
625 (slightly) more likely to act “outside of the box”. Yet, even for these new players, conformity to

top-down decisions seems to represent the rule. Indeed, in practice, hired players who do not adjust to the new organizations would just be benched.

Implications for theory

The field of professional sport competitions represents an ideal setting to observe behaviors and practices around the discovery, acquisition and deployment of new talents. Talents such as scientists, designers and experts are more than resources; they generate new opportunities for firms, which shape their ‘vision for the future’ around their human capital. Complementing theories explaining the strategic value of human capital through the resource-based view (Crook et al., 2011), we looked at the entrepreneurial opportunities linked with the discovery and deployment of new talents.

Our first contribution relates to the theory of human capital in entrepreneurship (Marvel et al., 2014; Unger et al., 2011). Earlier research considered the human capital of employees mostly from a strategic point of view, i.e. using the resource-based view to explain the link between the ‘stock’ of human capital and performance. Differently, our study shows an important distinction between the “stock” and the “flow” of human capital – the former represented by the roster quality and thus the available pool of talents, while the latter by the discovery and introduction of new talents in the organization. Our model highlights that they provide distinct effects on firm survival and growth. The former provides the basis for competitive advantage (both strategically and tactically), while the latter provides the basis for venturing into new market niches. For example, while the roster quality might explain which team is more likely to win the competition, the discovery of new talents might explain why a mid-table team immediately becomes a contender. Our results confirm that the ‘short supply’ and ‘semi-permanent tenure’ of talents create a gulf with competitors and guarantee at the very least survival in the market (e.g.

high-status organizations such as Juventus FC, AC Milan and FC Inter do not even consider the chances of relegation). Our results provide instead a more cautious view about the success of entrepreneurial orientations focused on high innovation, proactiveness and competitive aggressiveness. We highlight how these do not translate into superior (or inferior) performances, as apparently the opportunities and risk of discovering/deploying new talents are softened by external conditions or internal practices.

This connects to our second contribution, which relates to the literature on entrepreneurial orientation (Covin & Lumpkin, 2011; Lumpkin & Dess, 1996; Rosenbusch et al., 2013). Earlier studies have suggested that high innovation, proactiveness, risk-taking and competitive aggressiveness is related to superior performances (Rauch et al., 2009), although recent meta-analyses are emphasizing that this link is context-dependent (Rosenbusch et al., 2011). In the specific context of professional sport entrepreneurship, our results are consistent with the latter argument, as the link between entrepreneurial orientation (measured by the discovery of new talents) and performance was non-significant. On the upside, this suggests that the discovery of “too many” talents does not have destabilizing effects, if organizations control for the level and size of the overall human capital. On the downside, organizations did not gain added value from the acquisition of new players – i.e. we found no evidence that a team with more discovery of new talents systematically outperformed others with comparable human capital. We suggested that socialization tactics might be one field-level explanation for this result. Every soccer organization adopts training camps and similar initiatives, meant to adjust newcomers, reduce internal conflicts, and align players to a common ‘vision of the future’. In doing so, socialization tactics generate the *conformity* of talents to the organization. So, organizations can safely look at the human capital of new players to increase their chances of winning, but their deployment does

not per se produce disruptive effects. The temporary acquisition of players might be an exception, as it could subtract value from firms, arguably because leaving expectations and different affiliations increase the separation of values, beliefs and interests among talents.

Implications for practice

The findings allow a broader discussion on the competition between big and established firms (e.g. Juventus FC, AC Milan, FC Inter) and young (e.g. newly promoted) and less established ones (e.g. Atalanta, Genoa), i.e. between wealthy and less affluent owners. Our findings highlight a scenario in which the former can use their greater economic power to gain a long-term competitive advantage against the others, because they can invest in new human capital and fear limited negative repercussions. So, ‘rich’ organizations can (i) easily discover potential sources of competitive advantages (e.g. from constant match observations via advanced scouting systems); (ii) easily attract them (e.g. through the transfer market); and (iii) effectively exploit them (e.g. through socialization tactics and team management). As a result, entrepreneurs might just use their economic power to attract and retain their talents, and expect firm growth and survival. By contrast, the chances of long-term growth for younger, less rich, and less established teams is thwarted by their struggle to retain talents. The institutional properties of the field – i.e. high transparency of human capital opportunities as players’ skills are constantly visible and analyzed; fluid transfer market as organizations can easily attract skilled individuals with contracts and fees – are likely to generate barriers and opportunities for firm growth. On the one hand, established organizations (e.g. Juventus FC, Bayern Munich) have enjoyed continued success because of the strength of their ownership, and thus the capacity to attract and retain talents. On the other hand, organizations with new ownerships (e.g. Red Bull Leipzig, Manchester City and Chelsea) have seemingly enjoyed very rapid growth because money was

heavily invested in new players. Differently, other established and newly founded firms fail or live in a competitive ‘limbo’ as they lack the resources to retain talents.

CONCLUSIONS

Our study contributes to the debate on human capital in entrepreneurship studies. While previous research investigated the human capital of entrepreneurs, our study focused on the entrepreneurial orientation toward the discovery and deployment of new talents in the field of soccer organizations. Here, the discovery and exploitation of (players’) human capital is especially evident and transparent, as soccer organizations constantly innovate and take risks with the acquisition of new players. Our findings suggest differentiated effects of human capital stocks and flows on firms’ chances of survival, growth and success. This research cross-fertilizes concepts from strategy, organizational behavior and entrepreneurship studies to highlight the contributions of (i) greater stocks of human capital, which in conditions of short supply and semi-permanent tenure, can create a competitive gulf with others; (ii) greater flows of human capital, which may provide opportunities of ‘variety’ and risks of ‘separation’; and (iii) team managers with high-reputation, who may be appropriately equipped to deploy the talents of expert employees.

We believe that these considerations extend to any sector characterized by: (i) a key role of expert workers in determining firm growth (e.g. consultants, scientists, lawyers, artists); (ii) relatively ‘easy’ discovery of talents, either because performances are tangible (e.g. patents) and/or public (e.g. lawsuits). Consultancy, entertainment and professional firms exemplify organizations constantly engaged in the discovery, acquisition and exploitation of new talents - not unlike soccer clubs. Our findings suggest that entrepreneurs in established as well as newly founded firms can grow and succeed over time, if they keep their human capital “stock” high.

We recognize that our study has limitations that future research could usefully address for theory development. First, our cross-sectional approach does not allow causal inferences. Future studies can implement alternative approaches (e.g., ethnographies, case studies and grounded theory) to advance knowledge in this regard. Second, we focus on a peculiar empirical setting. Related to Bauer et al. (2007), we suggest testing the discovery and exploitation of human capital in contexts characterized by different intensities and structures of socialization tactics, regulations, and performances – in order to further refine theory in this regard. Alternatively, future research could test our propositions on conformity and careerism through models that explicitly include their measures. Other mediating and moderating factors may also improve our theoretical contributions, most notably, team leadership characteristics of team managers (e.g., style). Finally, we suggest future research to expand analysis on the entrepreneurship behaviors in sport environments. We noted that earlier research has sometimes investigated the decision-making of team managers and players or, conversely, the institutional entrepreneurship of sport leagues (e.g. Wright & Zammuto, 2011). We remark again the need to expand these two research streams, as well as connect them through more extended analyses of the entrepreneurial behavior of sport organizations, e.g. how they discover and exploit opportunities related to the human, social and technological capital (e.g. Marino et al., 2016), and how sport-related and financial goals inform the decision-making of owners and top managers.

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Table 1

Descriptive statistics and correlation matrix ($n = 342$)

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. TableRanking	-10.03	5.53	1.00													
2. NewPlayers	10.64	.42	-0.40***	1.00												
3. LoanedPlayers	2.37	2.73	-0.37***	0.58***	1.00											
4. AcquiredPlayers	8.27	3.57	-0.21***	0.79***	0.04	1.00										
5. TeamManagerAccomplishments	2.28	3.97	-0.32***	0.21***	0.28***	0.05	1.00									
6. OrganizationalReputation	4.03	7.00	-0.50***	0.18***	0.18***	0.09 [†]	0.30***	1.00								
7. CulturalProximity	0.11	0.13	-0.14**	0.17**	0.15**	0.10 [†]	0.05	0.15**	1.00							
8. OrganizationalProximity	1.41	0.71	-0.47***	0.55***	0.22***	0.52***	0.30***	0.44***	0.07	1.00						
9. RosterSize	31.58	4.57	-0.13*	0.41***	0.37***	0.23***	0.02	0.11*	0.34***	0.04	1.00					
10. RosterAge	25.54	1.26	-0.06	0.01	0.13*	0.09	0.03	0.21***	0.01	0.24***	0.11*	1.00				
11. RosterQuality	5.34	6.30	-0.53***	0.17**	0.01	0.21***	0.23***	0.69***	0.24***	0.63***	-0.17**	0.41***	1.00			
12. StadiumSeats	40,525	21,339	-0.55***	0.26***	0.26***	0.13*	0.37***	0.36***	0.18**	0.46***	0.10 [†]	0.15**	0.55***	1.00		
13. Penalization	0.026	0.16	-0.14**	0.01	0.00	0.01	0.03	0.09	0.04	0.08	0.04	0.10 [†]	0.16**	0.09 [†]	1.00	
14. NetTransfer	3.58	22.66	-0.27***	0.03	0.14**	0.07	-0.31***	0.34***	0.05	0.14*	0.00	0.10 [†]	-0.23***	0.31***	0.04	1.00

[†] $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 2
Regression models

Dependent variable: TableRanking	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
NewPlayers		-0.015* (0.007)	-0.041* (0.020)		-0.011 (0.007)	
NewPlayers ²			0.001 (0.001)			
LoanedPlayers				-0.026** (0.009)		-0.021* (0.010)
AcquiredPlayers				-0.008 (0.008)		-0.004 (0.008)
TeamManagerAccomplishments					0.040** (0.016)	0.040* (0.016)
NewPlayers x TeamManagerAccomplishments					-0.004** (0.001)	
LoanedPlayers x TeamManagerAccomplishments						-0.009* (0.004)
AcquiredPlayers x TeamManagerAccomplishments						-0.004* (0.002)
OrganizationalReputation	0.032*** (0.008)	0.031*** (0.008)	0.031*** (0.008)	0.028*** (0.008)	0.031*** (0.008)	0.028*** (0.008)
CulturalProximity	-0.215 (0.186)	-0.257 (0.187)	-0.283 (0.187)	-0.254 (0.185)	-0.251 (0.185)	-0.257 (0.183)
OrganizationalProximity	0.054 (0.050)	-0.019 (0.061)	-0.026 (0.061)	0.004 (0.062)	-0.035 (0.061)	-0.013 (0.061)
RosterSize	-0.033*** (0.005)	-0.027*** (0.006)	-0.028*** (0.006)	-0.025*** (0.006)	-0.026*** (0.006)	-0.025*** (0.006)
RosterAge	-0.050* (0.020)	-0.042* (0.020)	-0.043 (0.020)	-0.040* (0.020)	-0.040* (0.020)	-0.034† (0.020)
RosterQuality	0.025** (0.008)	0.028** (0.009)	0.028** (0.009)	0.031*** (0.009)	0.026** (0.009)	0.030*** (0.009)
StadiumSeats	9.06e-6*** (0.000)	8.44e-6*** (0.000)	8.60e-6*** (0.000)	7.81e-6*** (0.000)	8.88e-6*** (0.000)	8.37e-6*** (0.000)
Penalization	0.260 (0.171)	0.271 (0.170)	0.284† (0.170)	0.279 (0.170)	0.271 (0.169)	0.278† (0.168)
NetTransfer	-0.002† (0.001)	-0.002† (0.001)	-0.002† (0.001)	-0.002† (0.001)	-0.002* (0.001)	-0.002† (0.001)
Log likelihood	-919.45	-917.32	-916.31	-916.01	-913.50	-910.82
Wald- χ^2	195.60	199.60	200.85	209.91	205.27	219.90
Improvement over base model ($\Delta\chi^2$)	-	4.00	5.25	14.31	9.67	24.30
No. of Obs.	342	342	342	342	342	342

Standard errors reported in parentheses. † $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.